

# Arts Integrated Lesson Plan



**ART FORM:**  
Visual Art



**SUBJECT AREA:**  
Science

Lesson Title:  
**Pastel planets**

Grade:  
5

Contributor, School:  
Kathi Stevens, Berlin Intermediate

Time Frame:  
Two 45-minute sessions

## State Curriculum Content Standards, Indicators, Objectives

### Visual Art Content Standard(s)

1.0 Perceiving and Responding: Aesthetic Education

Students will demonstrate the ability to perceive, interpret, and respond to ideas, experiences, and the environment through visual art.

3.0 Creative Expression and Production

Students will demonstrate the ability to organize knowledge and ideas for expression in the production of art.

4.0 Aesthetics and Criticism

Students will demonstrate the ability to make aesthetic judgments.

### Science Content Standard(s)

Earth/Space Science

2.0 Students will use scientific skills and processes to explain the chemical and physical interactions (e.g., natural forces and cycles, transfer of energy) of the environment, Earth, and the universe that occur over time.

### Visual Art Content Indicator(s)

1.1 Identify, describe, and interpret observed form.

1.2 Identify and compare ways in which selected artworks represent what people see, feel, know, and imagine.

1.3 Analyze the use the elements of art and principles of design in order to plan and develop compositions that convey personal meaning.

3.1 Create images and forms from observation, memory, and imagination.

4.1 Identify and apply criteria to evaluate personally created artworks and the artworks of others.

### Science Content Indicator(s)

D: Astronomy

2.1. Identify and compare properties, location, and movement of celestial objects in our solar system.

2.2 Recognize and describe the causes of the repeating patterns of celestial events.

### Visual Art Content Objective(s)

1.1.a Analyze how physical qualities of people, animals, and objects are represented through the elements of art.

1.1.b Compose and render from observation

### Science Content Objective(s)

2.D.1.a Recognize that like all planets and stars, the Earth is spherical in shape.

2.D.1.b Identify the properties of the planet Earth that make it possible for the survival of life as we know it.

<p>subject matter that shows 3-dimensional form, light, shadow, qualities of surface texture, detail, and spatial relationships.</p> <p>1.3.b Select and use principles of design to create compositions that clarify ideas and feelings for the viewer.</p> <p>3.1.a Experiment with media, processes, and techniques to convey specific thoughts and feelings.</p> <p>3.1.b Manipulate art media, materials, and tools safely.</p> <p>3.1.c Create artworks that explore the uses of the elements of art and selected principles of design, such as pattern, repetition, contrast, balance, and unity, to express personal meaning.</p> <p>4.2.a Establish criteria for judging artworks by interpreting exemplary models.</p> <p>4.2.b Describe, analyze, interpret, and make judgments about personal artwork and artworks of others.</p>	<ul style="list-style-type: none"> <li>• Temperature</li> <li>• Location</li> <li>• Presence of an atmosphere</li> <li>• Presence of water (solid, liquid, and gas)</li> </ul> <p>2.D.1.c Compare the properties of at least one other planet in our solar system to those of Earth to determine if it could support life as we know it.</p> <p>2.D.1.d Identify and describe physical properties of comets, asteroids, and meteors.</p> <p>2.D.1.e Provide evidence that supports the idea that our solar system is sun-centered.</p> <p>2.D.2.a Describe the rotation of the planet Earth on its axis.</p> <p>2.D.2.b Recognize and describe that the rotation of the planet Earth produces observable effects.</p> <ul style="list-style-type: none"> <li>• The day and night cycle</li> <li>• The apparent movement of the sun, moon, planets, and stars</li> </ul> <p>2.D.2.c Describe the revolution of the planet Earth around the sun.</p> <p>2.D.2.d Recognize and describe that the revolution of the planet Earth produces effects.</p> <ul style="list-style-type: none"> <li>• The observable patterns of stars in the sky stay the same although different stars can be seen in different seasons.</li> <li>• Length of year</li> </ul> <p>2.D.2.e Verify with models and cite evidence that the moon's apparent shape and position change.</p>
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### Objective(s) (Connecting the content areas)

Students will create a pastel drawing based on the planets and the solar system, using the elements of space (perspective), value (light source), and color theory (warm and cool colors).

### Key Arts Curriculum Vocabulary

*space, value, color theory, perspective, light source, shading, warm and cool colors*

### Key Science Vocabulary

*asteroids, planets, meteors, comets, crater, gaseous, galaxy, stars*

### Prior Knowledge Students Need for This Lesson

#### Arts

- Students have already completed prior lessons on perspective, value, and color theory.
- Students understand the purposes of warm and cool colors.
- Students have practiced using pastels to create value: shading from light to dark.
- Students have already splattered their black paper with white tempera paint.

#### Science

- Students have completed the unit on astronomy and the solar system.
- Students have completed written work and quizzes based on the identification of the planets, asteroids, comets, meteors, etc.

### Materials and Resources

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**Materials and Resources for the Class**

- 11 circle templates of different sizes per table
- Pencils
- Kneaded erasers
- Paintings from art history created with pastels
- Pastels
- Black paper, 18 x 24
- White tempera paint
- Books related to space

**Materials and Resources for the Teacher**

- Books and photographs related to space
- Exemplar
- Art work reflecting pastel techniques

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**Lesson Development/Procedures (including motivation, modeling, guided practice, and independent practice)**

- The teacher demonstrates how to use pastels and reviews warm and cool colors, perspective, and value.
- The teacher provides examples of artwork that illustrate how pastels are used to create value and perspective.
- Students analyze photographs of planets and the solar system, comparing objects, perspectives, and colors found in the images (individually, in pairs, or in small groups).
- Students plan their drawings by manipulating the circle templates representing the planets.
- Students use the different size circle templates to create a powerful feeling of perspective. Larger circles are used in the foreground, and smaller circles are used in the background. Overlapping is encouraged.
- Students choose where the light source is coming from.
- Using warm colors on the circles in the foreground and cool colors in the background, students use value to create 3-dimensional planets.
- Asteroids, meteors, craters, stars, and comets may be added.
- Students use an index card to create a key for their drawings, identifying the planets and space objects.
- Attach the index card to the bottom right-hand side of the picture or beside it in a display.

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**Closure/Summary**

Students will take part in a Gallery Walk based on the criteria of the drawing process and their knowledge of the planets and space objects.

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**Assessment (Description/Tools)**

- Students will be tested for their knowledge of the solar system and art concepts by way of a written response related to the solar system that they created. (The teacher may create a writing prompt.)
- The pastel drawing will depict the proper lineup of the planets.
- The pastel drawing will show strong evidence of perspective and good use of value and color. (A rubric can be developed based on the criteria determined by the teacher and students.)

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**Lesson Extensions**

None